UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,688	10/10/2001	Daniel R. Drake	RSW920010146US1	7959

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EXAMINER
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ART UNIT	PAPER NUMBER
2122	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
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<tr><td colspan="2">Ted T. Vo</td><td>2122</td><td></td></tr>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Applicants' amendment and arguments filed on 7/18/04, responding to the Office action

(04/19/04) have been fully considered.

   Claims 1-2, 4, 6-9, and 11 are amended. Claims 12-24 are newly added.

   Claims 1-24 are pending in the application.

Drawings

2.   The amendments to Fig. 3, filed on 7/18/04, are accepted by Examiner for examination purpose.

Response to Arguments

3.   Applicants amended the independent Claims 1, 6, and 9, with newly limitation "for a data value"

and "within" for replacing previous limitation "with", and then emphasize that "the encapsulating of

validation with the data values causes the validation to 'become a part of' the data model (remarks: page

9, the last paragraph). With this amendment, Applicants argue that the reference that does not teach

"within a data model to which they apply" (remarks: page 10, the first full paragraph) of Claims 1, 6, and 9.

   Applicants' argument to this amendment has been fully considered. However, the amendment to

this newly added limitation in Claims 1, 6, and 9, necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

   All Applicants' arguments with respect to amended Claims 1, 6, and 9 given in Remarks section

(pages 9-12) have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a
> printed publication in this or a foreign country, before the invention thereof by the applicant for a
> patent.

5.   Claims 1-24 are rejected under 35 U.S.C. 102(a) as being anticipated by McLaughlin, "Validation

with Java and XML Schema" Parts 1-4, Dec 2000.

As per claim 1: McLaughlin discloses,

> "*A method of improving data validation, comprising steps of:*
>
> *defining one or more validation criteria for a data value* (See part 1, page 8: "Validation

constraints using XML Schema", "ShoeSize" *validation criteria*; value range 0-20: *for a data value*); *and*

> *encapsulating* (See part 2, page 3, "XML to Java" referring to "XML Schema constraint to Java

objects") *the defined validation criteria within a data model to which they apply*" (See part 2, page 3,

section "XML to Java" the Java object that represent the XML Schema, and see pages 4-6, referring to

Name attributes in the XML Schema: For example: ServiceConfiguration, ShoeSize: *a data model*).

As per claim 2: McLaughlin discloses, "*The method according to claim 1, further comprising the step of*

using the defined validation criteria to validate the data value for the data model" (See part 1, page 4,

class Shoebean).

As per claim 3: McLaughlin discloses, "*The method according to claim 1, wherein the validation criteria*

are expressed in a markup language notation" (See part 1, page 8, in the XML Schema: the value range).

As per claim 4: McLaughlin discloses, "*The method according to claim 3, wherein the markup language*

notation is XML ("Extensible Markup Language") notation" (See part 1, page 8, the XML Schema).

As per claim 5: McLaughlin discloses, "*The method according to claim 1, wherein the data model and the validation criteria are expressed in a markup language notation*" (See part 1, page 8, the XML Schema: "shoeSize").

As per claim 12: McLaughlin discloses, "*The method according to Claim 1, further comprising the step of invoking a validate method for the data value, thereby triggering a validation for data value using its defined validation criteria*" (See part1: page 4, class Shoebean).

As per claim 13: McLaughlin discloses, "*The method according to Claim 1, further comprising the step of associating a validation object containing the defined validation criteria with a variable use to hold the data value* (See part1: page 4, class Shoebean, variable shoeSize).

As per claim 14 McLaughlin discloses, "*The method according to Claim 13, wherein the associating step further comprises the step of specifying, as a value for name attribute of validation object, a name of the variable*" (See part1: page 4, class Shoebean, variable shoeSize; and page 8, the XML Schema, attribute name="shoeSize").

As per claim 15: McLaughlin discloses, "*The method according to Claim 1, wherein the date value is a string data value and the defined validation criteria include one or both a minimum length for a string data value and a maximum length for the string data*" (See part1, page 7, Java property files specifying validation constraints; part3: page 11, Range checking).

As per claim 20: McLaughlin discloses, "*The method according to Claim 1, further comprising the steps of: Upon closing a window in which the data value is rendered, delegating validation of the data value to data model; and responding to the delegation by using the defined validation criteria to validate the data value*" (See part2, page 2, Perusing the Option: using XML for data constraints; see page 3, XML to java. (Examiner note: XML is used to render data value via the computer window/browser where the data is delegated to the Java environment for running validation)).

As per claim 22: McLaughlin discloses, "*The method according to Claim 1, further comprising the steps of: revising the defined validation criteria for data value; and encapsulating the revised validation criteria within the data model, thereby enabling changeable validation of the data value*" (See rationale in Claim

1, and further referring the XML document (part1: page 8, second paragraph) that allows a user to change/revise the validated constraints).

As per claim 6: Regarding,

"*A system for improving data validation, comprising: means for defining one or more validation criteria for data value; means for encapsulating the defined validation criteria within a data model to which they apply; and means for using the defined validation criteria to validate a data value for the data model*": The claim recites the limitation having claimed functionality corresponding to Claim 1. Therefore, Claim 6 is rejected in the same reason as set forth in connecting to the rejection of Claim 1.

As per claim 7: Regarding,

"*The system according to claim 6, wherein the data model, the data value, and the validation criteria are expressed in a markup language notation*": The claim recites the limitation having claimed functionality corresponding to Claim 5. Therefore, Claim 7 is rejected in the same reason as set forth in connecting to the rejection of Claim 5.

As per claim 8: Regarding,

"*The system according to claim 7, wherein the markup language notation is XML ("Extensible Markup Language") notation*": The claim recites the limitation having claimed functionality corresponding to Claim 4. Therefore, Claim 8 is rejected in the same reason as set forth in connecting to the rejection of Claim 4.

As per Claim 16: McLaughlin discloses the means in claim 16 from Java class converted by an XML schema, particularly addressed in the summary, part1, page 1.

As per Claim 17: McLaughlin discloses the means in claim 17 by including HTML elements, for example HTML FORM (part1, page 5: Data types), where HTML elements, associated with XML, are used to create user interface buttons for inputting validated values.

As per Claim 18: Regarding limitation of Claim 18, the limitation is corresponding to Claim 20. See rationale addressed to Claim 20 above.

As per Claim 19: McLaughlin discloses the means of Claim 19 from including HTML tags, for example HTML FORM (part1, page 5: Data types) and other tags, where HTML tags/attributes like FORM, A elements (associated with XML, are used to create control widgets) by nature providing lose focus (A element including attribute href shows "losing focus" on the hyperlink after an act of a click), a blinking cursor in the text area created by FORM, etc.).

As per Claim 23: Regarding limitation of Claim 23, the limitation is corresponding to Claim 22. See rationale addressed to Claim 22 above.

As per claim 9: Regarding,

"A computer program product for improving data validation, the computer program product embodied on one or more computer-readable media and comprising: computer-readable program code means for defining, for a data value, one or more validation criteria; computer-readable program code means for encapsulating the defined validation criteria within a data model to which they apply; and computer-readable program code means for using the defined validation criteria to validate the data value for the data model": The claim recites the limitation having claimed functionality corresponding to Claim 1. Therefore, Claim 9 is rejected in the same reason as set forth in connecting to the rejection of Claim 1.

As per claim 10: Regarding,

"The computer program product according to claim 9, wherein the data model and the validation criteria are expressed in a markup language notation": The claim recites the limitation having claimed functionality corresponding to Claim 3. Therefore, Claim 10 is rejected in the same reason as set forth in connecting to the rejection of Claim 3.

As per claim 11: Regarding,

"The computer program product according to claim 10, wherein the markup language notation is XML ("Extensible Markup Language") notation": The claim recites the limitation having claimed functionality corresponding to Claim 4. Therefore, Claim 11 is rejected in the same reason as set forth in connecting to the rejection of Claim 4.

As per Claim 21: McLaughlin discloses the means in claim 21 by including Exception such as the throw Exceptions to examine a given value based on the set of rules (part1, page 3, program doGet, part3, pages 7-8, program within Handling attributes), where each Exception provides notification based on a constraint definition).

As per Claim 24: Regarding limitation of Claim 23, the limitation is corresponding to Claim 22. See rationale addressed to Claim 22 above.

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

        Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (703) 308-9049. The examiner can normally be reached on 8:00AM to 5:30PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

After October 28, 2004, examiner can be reached at new telephone number (571) 272-3706 and the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3694.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTV
Patent Examiner
Art Unit 2122
October 8, 2004

ANTONY NGUYEN-BA
PRIMARY EXAMINER